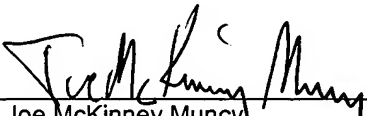




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TRANSMITTAL OF APPEAL BRIEF			Docket No. 0941-0947PUS1
In re Application of: Te-Fu CHEN et al.			
Application No. 10/827,285-Conf. #2646	Filing Date April 20, 2004	Examiner D. J. Hanan	Group Art Unit 3745
Invention: FAN ASSEMBLY AND IMPELLER THEREOF			
<p style="text-align: center;"><b><u>TO THE COMMISSIONER OF PATENTS:</u></b></p> <p>Transmitted herewith is the Appeal Brief in this application, with respect to the Notice of Appeal filed: <u>June 14, 2006</u> .</p> <p>The fee for filing this Appeal Brief is <u>\$ 500.00</u> .</p> <p><input checked="" type="checkbox"/> Large Entity      <input type="checkbox"/> Small Entity</p> <p><input type="checkbox"/> A petition for extension of time is also enclosed.</p> <p>The fee for the extension of time is _____ .</p> <p><input checked="" type="checkbox"/> A check in the amount of <u>\$ 500.00</u> is enclosed.</p> <p><input type="checkbox"/> Charge the amount of the fee to Deposit Account No. <u>02-2448</u> . This sheet is submitted in duplicate.</p> <p><input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.</p> <p><input checked="" type="checkbox"/> The Director is hereby authorized to charge any additional fees that may be required or credit any overpayment to Deposit Account No. <u>02-2448</u> . This sheet is submitted in duplicate.</p> <div style="display: flex; justify-content: space-between; align-items: flex-end;"><div style="width: 60%;"><p> _____ Joe McKinney Muncy Attorney Reg. No. : 32,334 BIRCH, STEWART, KOLASCH &amp; BIRCH, LLP 8110 Gatehouse Road Suite 100 East P.O. Box 747 Falls Church, Virginia 22040-0747 (703) 205-8026</p></div><div style="width: 35%; text-align: right;"><p>Dated: <u>August 14, 2006</u></p></div></div>			



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<b>FEE TRANSMITTAL</b> <b>For FY 2006</b>		<b>Complete if Known</b>	
		Application Number	10/827,285-Conf. #2646
		Filing Date	April 20, 2004
		First Named Inventor	Te-Fu CHEN
		Examiner Name	D. J. Hanan
		Art Unit	3745
		Attorney Docket No.	0941-0947PUS1
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27			
<b>TOTAL AMOUNT OF PAYMENT</b>	<b>(\$)</b> 500.00		

<b>METHOD OF PAYMENT</b> (check all that apply)	
<input checked="" type="checkbox"/> Check	<input type="checkbox"/> Credit Card
<input type="checkbox"/> Money Order	<input type="checkbox"/> None
<input type="checkbox"/> Other (please identify):	
<input type="checkbox"/> Deposit Account	Deposit Account Number: 02-2448
	Deposit Account Name: Birch, Stewart, Kolasch & Birch, LLP
For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)	
<input type="checkbox"/> Charge fee(s) indicated below	<input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee
<input checked="" type="checkbox"/> Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17	<input checked="" type="checkbox"/> Credit any overpayments

<b>FEE CALCULATION (All the fees below are due upon filing or may be subject to a surcharge.)</b>							
<b>1. BASIC FILING, SEARCH, AND EXAMINATION FEES</b>							
	<b>FILING FEES</b>		<b>SEARCH FEES</b>		<b>EXAMINATION FEES</b>		
		<u>Small Entity</u>		<u>Small Entity</u>		<u>Small Entity</u>	
<b>Application Type</b>	<b>Fee (\$)</b>	<b>Fee (\$)</b>	<b>Fee (\$)</b>	<b>Fee (\$)</b>	<b>Fee (\$)</b>	<b>Fee (\$)</b>	<b>Fees Paid (\$)</b>
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	
<b>2. EXCESS CLAIM FEES</b>							
						<b>Small Entity</b>	
						<b>Fee (\$)</b>	<b>Fee (\$)</b>
<b>Fee Description</b>							
Each claim over 20 (including Reissues)						50	25
Each independent claim over 3 (including Reissues)						200	100
Multiple dependent claims						360	180
<b>Total Claims</b>						<b>Multiple Dependent Claims</b>	
<b>Extra Claims</b>						<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>
12 - 20 = _____ x _____ = _____							
HP = highest number of total claims paid for, if greater than 20.							
<b>Indep. Claims</b>						<b>Fee Paid (\$)</b>	
<b>Extra Claims</b>							
2 - 3 = _____ x _____ = _____							
HP = highest number of independent claims paid for, if greater than 3.							
<b>3. APPLICATION SIZE FEE</b>							
If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).							
<b>Total Sheets</b>		<b>Extra Sheets</b>	<b>Number of each additional 50 or fraction thereof</b>		<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>	
_____ - 100 = _____		/50	_____ (round up to a whole number) x _____		= _____		
<b>4. OTHER FEE(S)</b>							
Non-English Specification, \$130 fee (no small entity discount)						<b>Fees Paid (\$)</b>	
Other (e.g., late filing surcharge): 1402 Filing a brief in support of an appeal						500.00	

<b>SUBMITTED BY</b>			
Signature		Registration No. (Attorney/Agent)	32,334
Name (Print/Type)	Joe McKinney Muncy	Telephone	(703) 205-8026
		Date	August 14, 2006



Docket No.: 0941-0947PUS1  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Te-Fu CHEN et al.

Application No.: 10/827,285

Confirmation No.: 2646

Filed: April 20, 2004

Art Unit: 3745

For: FAN ASSEMBLY AND IMPELLER THEREOF

Examiner: D. J. Hanan

**APPEAL BRIEF**

MS Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

As required under § 41.37(a), this brief is filed within two months of the Notice of Appeal filed in this case on June 14, 2006, and is in furtherance of said Notice of Appeal.

The fees required under § 41.20(b)(2) are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

This brief contains items under the following headings as required by 37 C.F.R. § 41.37 and M.P.E.P. § 1206:

I.	Real Party In Interest		
II	Related Appeals and Interferences		
III.	Status of Claims		
IV.	Status of Amendments		
V.	Summary of Claimed Subject Matter		
VI.	Grounds of Rejection to be Reviewed on Appeal		
VII.	Argument	08/15/2006 SDEHBOB1 00000001 10827285	
VIII.	Claims	01 FC:1402	500.00 OP
IX.	Evidence		
X.	Related Proceedings		
Appendix A	Claims		

I. REAL PARTY IN INTEREST

The real party in interest for this appeal is:

Delta Electronics Inc. as recorded on April 20, 2004 at reel 015236, frame 0892. No further Assignments of this application have been made.

II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS

There are no other appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

A. Total Number of Claims in Application

There are 12 claims pending in application.

B. Current Status of Claims

1. Claims canceled: none
2. Claims withdrawn from consideration but not canceled: none
3. Claims pending: 1-12
4. Claims allowed: none yet
5. Claims rejected: 1-12

C. Claims On Appeal

The claims on appeal are claims 1-12

#### IV. STATUS OF AMENDMENTS

Applicant did not file an Amendment After Final Rejection. There are no unentered Amendments in this application.

#### V. SUMMARY OF (Invention) CLAIMED SUBJECT MATTER

The present invention relates to an impeller 30 for a fan driven by motor 35. In the fan assembly, a frame 36, motor 35 and hub 32 with a plurality of blades 31 are provided. Different embodiments are disclosed in the present application. The first embodiment of Figures 3A-3C will initially be discussed. In this embodiment, the hub 32 will accommodate the motor 35 therein. The hub has an upper surface 321, a sidewall 322 and a center point C. (Page 5, lines 11-12). A plurality of blades 31 will create radially air flow. The blades 31 have bottom portions 31b. In the arrangement of Figure 3 through 3C, the bottom portions are attached at the sidewalls 322 of the hub 32. In other embodiments which will be discussed below, the blades 31 have bottom portions which are connected to the upper surface 321 of the hub 32. As shown in the prior art of Figure 2A and 2B, for example, various connectors, such as ribs 25, had previously been used to hold the blades in position. However, in the present invention, there is no separate connecting structure provided between the hub 32 and the blades 31. Rather the blades are directly mounted on either the upper surface 321 or side 322 of the hub 32.

Figure 3D shows a first variant of the invention. This variant has an inner diameter  $d$  for blades 31 which is equal to the maximum diameter  $L$  of the hub 32. (Page 5, lines 24-27). Thus, while the blades 31 will extend onto the top of the hub in the first variant of Figures 3A-3C, the blades are only on the sides of the hub in the embodiment of Figure 3D.

In the variant of Figure 3E, the blades 31 are entirely disposed on the upper surface 322 of the hub 32. (Page 6, lines 9 and 10).

Figures 4A and 4B show a second embodiment. In this embodiment, each plate 31 is disposed on the upper surface 322 of the hub 32. The outer diameter of the blades equals the

maximum diameter L of the hub 32. (Page 6, lines 24-26). Thus, the blades do not overhang the hub in this embodiment.

Finally in Figure 5, a third embodiment is shown with the blades 31 being spaced slightly inwardly from the sidewall 322 of the hub. (Page 7, lines 5-9). Thus, the outer diameter D3 of the blades is smaller than the maximum diameter L of the hub 32.

In all embodiments, the blades 31 are either on the upper surface 321 or the sidewall 322 of the hub 32. No connecting structures are provided between the hub 32 and the blades 31.

The notations of the figures and specification page above was done to comply with the Brief requirements of the U.S. Patent and Trademark Office and is not considered to be limiting the claims

#### VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-6, 6-10 and 12 are finally rejected under 35 U.S.C. § 102(b) by Nagai, U.S. Patent 4,647,271.

Claims 5 and 11 stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Nagai et al.

Thus, all of the claims are finally rejected.

#### VII. ARGUMENT

Transmitted herewith is an Appeal Brief on behalf of the Appellants in connection with the above-identified application. This is an Appeal from the Final Office Action dated February 14, 2006 finally rejecting claims 1-12 in the above-identified application. The Appealed Claims 1-12 are set forth in attached Appendix.

***Claims 1-4, 6-10 and 12***

The Examiner has relied upon the patent to Nagai et al. to disclose an impeller for a centrifugal blower. The Examiner seems to rely upon the embodiments from Figures 23-27. In these embodiments, an impeller 40 is provided with a hub 41. A hub plate 42 is also provided. On this hub plate a plurality of plates 43 and a shroud 44 are formed. While these elements are formed by injection molding, different components are provided. The blades in Nagai are mounted on the hub plate 42 and not the hub 41. Thus, this patent does not teach that the blades are directly disposed on the hub.

By avoiding an intermediate structure, a simpler impeller can be designed in the present invention. Also, such additional structures can interfere with the air flow as has been discussed in the specification of the present invention. By mounting the blades directly on the upper surface or the sidewall of the hub, the present invention can have a smooth efficient air flow. A motor and hub can be arranged such that they are in an out of the way position and will not interfere with air flow. Turbulence can be reduced while efficiency of the fan is maintained.

***Dependent Claims 5 and 11***

Recognizing that the blades of Nagai either extend to or beyond the hub plate, the Examiner has alleged that it would be obvious to modify this arrangement to have the plates with an outer diameter less than that of the hub. However, there is no motivation for such a modification. Moreover, it should be noted that it is element 41 which is the hub in Nagai and the additional element of the hub plate 42 as provided. Thus, the blades all extend well beyond the hub 41. If they were made so closely spaced as to be on the small hub 41, then the efficiency of the fan would be hindered. One of ordinary skill in the art would not make this modification as proposed by the Examiner.

In summary, it is believed that independent claims 1 and 7 as well as the dependent claims all set forth an impeller for a fan driven by a motor and a fan assembly which is neither suggested nor rendered obviousness by the prior art utilized by the Examiner. It is believed that the Appellant has counted all of the reasons given for the rejections of the appealed claims and thus, these rejections do not appear to be proper. Accordingly, it is respectfully requested that this Board reverse the final rejection of claims 1-12.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

#### VIII. CLAIMS

A copy of the claims involved in the present appeal is attached hereto as Appendix A.

#### IX. EVIDENCE

No evidence pursuant to §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the examiner is being submitted.

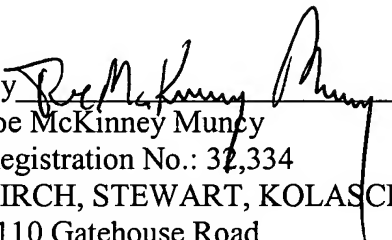


X. RELATED PROCEEDINGS

No related proceedings are referenced in II. above, or copies of decisions in related proceedings are provided. Hence, no Appendix is included.

Dated: August 14, 2006

Respectfully submitted,

By   
Joe McKinney Muncy  
Registration No.: 32,334  
BIRCH, STEWART, KOLASCH & BIRCH, LLP  
8110 Gatehouse Road  
Suite 100 East  
P.O. Box 747  
Falls Church, Virginia 22040-0747  
(703) 205-8000  
Attorney for Applicant

**APPENDIX A**

**Claims Involved in the Appeal of Application Serial No. 10/827,285**

1. (Previously Presented) An impeller for a fan driven by a motor, comprising:  
a hub, accommodating the motor therein and having an upper surface, a sidewall and a center point; and  
a plurality of blades creating radial air flow and having bottom portions directly arranged in a circle on the upper surface or the side wall with respect to the center point, wherein no connecting structure is provided between the hub and the blades.
2. (Original) The impeller as claimed in claim 1, wherein the blades are formed into an annular structure, having an outer diameter greater than that of the hub.
3. (Original) The impeller as claimed in claim 2, wherein the hub further has a sidewall, and the bottom portion of each blade has a portion extending downward along the sidewall.
4. (Original) The impeller as claimed in claim 1, wherein the blades are formed into an annular structure, having an outer diameter equal to that of the hub.
5. (Original) The impeller as claimed in claim 1, wherein the blades are formed into an annular structure, having an outer diameter less than that of the hub.

6. (Original) The impeller as claimed in claim 1, wherein the hub and the blades are integrally formed.

7. (Previously Presented) A fan assembly, comprising:

a frame;

a motor, disposed in the frame;

a hub, disposed in the frame and containing the motor therein, having an upper surface, a sidewall and a center point; and

a plurality of blades, creating radial air flow and having bottom portions directly arranged in a circle on the upper surface or the side wall with respect to the center point, wherein no connecting structure is provided between the hub and the blades.

8. (Original) The fan assembly as claimed in claim 7, wherein the blades are formed into an annular structure, having an outer diameter greater than that of the hub.

9. (Original) The fan assembly as claimed in claim 8, wherein the hub further has a sidewall, and the bottom portion of each blade has a portion extending downward along the sidewall.

10. (Original) The fan assembly as claimed in claim 7, wherein the blades are formed into an annular structure, having an outer diameter equal to that of the hub.

11. (Original) The fan assembly as claimed in claim 7, wherein the blades are formed into an annular structure, having an outer diameter less than that of the hub.

12. (Original) The fan assembly as claimed in claim 7, wherein the hub and the blades are integrally formed.